



The A. S. C. Mourn  
Our Departed Brother



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## What Is an Akeley?

By IRA HOKE, A. S. C.

There is a remarkable camera in Hollywood. No, it is not a "new gag", but a camera with a long history of efficient service to its credit. It is the most difficult motion picture camera to operate successfully now in professional use in the Hollywood studios, but with it have been photographed some of the most thrilling action scenes on the screen today.

Its name is "AKELEY".

So named for its inventor, the late Carl E. Akeley, noted photographer of wild animal life in the African jungle, the Akeley camera has brought to the silver screen something of the elementary abandon of impulsive motion heretofore known only to those who have followed the paths of the great untamed into its secret hiding places.

The realistic portrayal of any spectacular movement by the motion picture camera hinges primarily on co-ordination of speeds. The photographer must so regulate the speed of the camera that when thrown on the screen the picture will carry to the spectator an exact reproduction of every thrill he should have experienced had he actually watched the action. Because the Akeley is specially adapted for this purpose is the reason why this instrument is known through the cinema world as "the remarkable camera". It was designed with the idea of portraying the most elusive and ungovernable speeds in the world; the gaits of wild animals. It is operated in the commercial studios by men who specialize in the photography of moving objects. These men "shoot" no other motion picture camera professionally. They are known as Akeley Specialists. They are specialists in speed, the Akeley camera is their medium of expression.

Mechanically the Akeley differs from other motion picture cameras in two major points. They are the panorama movement and the degrees of shutter opening these points being incorporated in its design with the sole purpose of adapting it to the photography of rapidly moving objects.

The most radical difference is its panorama movement. Instead of the ordinary crank and gear control, the Akeley is swung and also tilted by a pair of controls, which are a train of gears terminating in a small fly wheel which governs the action with a gyroscopic precision. In other words the action of the camera when moved from side to side or up and down can never be jerky. Its movement can best be described as floating.

If we want the spectator to get the full thrill of a daring, whirlwind chase on horseback we cannot expect to get it over by setting our stationary cameras along the roadside and letting the horseman dash jumplily through the scene several times at different locations. But look what we may accomplish with the Akeley camera placed at a strategic point some distance from the horsemen! With the telephoto lens we are enabled to procure a greatly magnified image of the distant horsemen; a "close-up" in fact. The increased distance between the camera and the horsemen allows the latter a wide sweep across the prairie with the camera as a pivot point. The camera with its floating gyroscopic swing can center the moving screen upon the most daring chase as accurately as you point your finger, or watch the movement with your eyes.

Suppose we have a cavalry charge to portray. The best we can accomplish with the stationary camera shows a distant group of seething horses dashing madly through the scope of the picture. With the magic of the Akeley camera and its telephoto lenses we are able to throw our spectator right among the charging brigade. He stays with them, they do not merely dash past. He can see the light of conquest in the eyes of the leader, the frothing horses, a swaying dash of fighting men and beasts so CLOSE that the spectator can imagine himself actually there struggling among the soldiers. The spectator lives that scene because he SEES it.

Now that takes us back to the first mention of speed portrayal. The spectator cannot live a scene if that scene is not photographed as the eye would naturally

record the impressions. Take a horseback chase for instance. If every movement of the horses is recorded clean and sharp, or in other words stopped in action, on the cine negative in a manner considered perfect for a still photograph, it will, when reproduced on the screen, suggest an unnatural stiffness in the movements of the animals. Thus, while it may be perfect for a still photograph, critical movement sharpness of each frame of a motion picture film may prove a serious fault. The screen portrayal will in all probability lack the so termed liquid movement necessary to the reproduction of motion.

In the photography of fast panorama movements encountered in typical Akeley scenes this sharpness is apt to prove distracting because the eye tries to accustom itself to its usual sensations upon observing cross motion.

The Akeley camera was designed with a thought toward lessening harsh cross-screen action by the incorporation of a shutter with an unusually wide degree opening. This is called the plastic movement shutter, and has a full opening of 230 degrees. During the passage of this wide opening before the film quite a noticeable movement takes place in the object photographed. Thus the movement in a single frame of the film is not entirely stopped or "frozen" and when projected rapidly upon the screen the effect is to smooth out the action. The use of the plastic shutter is resorted to by the Akeley cinematographer in cases where extreme speed of cross movements would reproduce better in his estimation if it were "liquified".

For the photography of slower moving objects such as yachts, ocean liners, aeroplanes, etc., the cinematographer usually inserts in the Akeley a shutter adjustable from 180 degrees down to only 20 degrees. Thus the "remarkable camera" once more demonstrates its versatility by allowing the use of a wide angle shutter to liquify sharp movements and a narrower angle shutter to correctly portray movements naturally of a plastic nature.

The Akeley in no way replaces ordinary dramatic cameras, nor is it so intended. It is an auxiliary tool only; a special apparatus specializing in speed portrayal. Whether that speed be slow or fast, the efficiency of the Akeley is unchallenged. It has a field of its own, but a



Akeley Specialist, Ira B. Hoke, operating the combination Akeley and Bell & Howell on the D. W. Griffith picture, "Drums of Love."

field closely interwoven with the work produced by the dramatic instrument. The director of modern productions interperses Akeley scenes into the regular photographic action for the purpose of "pepping up" sequences which otherwise would drag. It is not unusual for the theatre goer to observe a series of scenes just about to verge on monotony suddenly set out from the story with dramatic vividness by the incorporation of several well chosen Akeley "shots".

The greatest directors in the motion picture industry today recognize in this speed specializing camera one of their most valuable tools in portraying the true motion of the photographic subject in its vital relation to the story.

## Program S. M. P. E. (Continued from Page 5)

Projecting of Motion Pictures" by A. C. Hardy and R. W. Conant, Massachusetts Institute of Technology, Cambridge, Mass.

12:30 Luncheon.

2:00 Papers:

"Pull Down Mechanisms for Motion Picture Cameras" and "A Spring Driven 35 mm. Camera" by A. S. Newman, Newman-Sinclair, Ltd., London, England.

"Motion Picture Photography at High Altitudes" by J. Noel, Cinematographer, Mount Everest expedition.

"The Magnascope" by H. Rubin, Supervisor of Projection, Public Theatres Corp.

"The Lateral Swelling of Thin Sheets of Gelatin and Photographic Emulsions During Photographic Processing" by S. E. Sheppard and J. McNally, Research Laboratory, Eastman Kodak Co., Rochester, N. Y.

"Equipping an Animation Studio," by C. Gilette, Eastman Kodak Co., Rochester, N. Y.

"The Control of Exposure in Printing" by C. F. Tuttle, Research Laboratory, Eastman Kodak Co., Rochester, N. Y.

"A Device for the Accurate Timing of Master Positives in the Printing of Duplicate Negatives" and

"Reduction Printing in Cinegraph Production" by J. G. Capstaff, Research Laboratory, Eastman Kodak Co., Rochester, N. Y.

"Dye Toning with Single Solutions" by J. I. Crabtree and C. E. Ives, Research Laboratory, Eastman Kodak Co., Rochester, N. Y.

## Bodine With B. & H.

The Bell & Howell Company, manufacturers of professional and amateur (Filmo) moving picture equipment, recently appointed Mr. H. O. Bodine to take charge of their New York Office and serve as Eastern Sales Manager. This position was formerly held by F. A. Cotton, who not long ago met with a very unfortunate accident which proved fatal.

Mr. Bodine needs no introduction to the photographic industry, having been actively and prominently connected with this fascinating profession throughout his entire business experience of 25 years. Dealers and users of Filmo equipment will find Mr. Bodine thoroughly conversant with every factor of the game.

Developing a lively interest in photography in his youth, Mr. Bodine had landscapes and genres accepted and hung in principal photographic exhibits and salons of the world. This successful amateur work led to his entering commercial photography as a profession, in which endeavor he gained a broad, practical experience in commercial, portrait and scientific photography.

The development of the American Photographic Salon was materially aided by Mr. Bodine's ability, as was the organization of the Photographic Dealers' Association of New York, and the Photographic Dealers' Association of America. In the management of the first international Exposition of the Photographic Arts and Industries at Grand Central Palace, New York City, 1914, and of the International Photographic Exhibition, Grand Central Palace, 1913, Mr. Bodine was a prime mover.

His business experience has included the following connections: Sales Manager of Raw Film Supply Company, New York City; Advertising and Sales Manager of the following firms: Wollensak Optical Company, Rochester, N. Y.; Herbert & Huesgen, New York City; Agfa Products, Inc., and Gevaert Company of America, New York City.

Through this intensive experience in photographic activities, Mr. Bodine is exceptionally well qualified for his new position.